

Name: \_\_\_\_\_

**at1113exam: Expand, factor, and solve quadratics (v317)**

1. Solve the equation.

$$(4x - 3)(7x + 9) = 0$$

2. Expand the following expression into standard form.

$$(4x + 3)^2$$

3. Expand the following expression into standard form.

$$(5x + 6)(7x + 4)$$

4. Expand the following expression into standard form.

$$(3x - 8)(3x + 8)$$

5. Solve the equation with factoring by grouping.

$$18x^2 + 12x + 15x + 10 = 0$$

6. Factor the expression.

$$x^2 - 3x - 54$$

7. Solve the equation.

$$10x^2 - 46x + 35 = 5x^2 - 2x + 3$$

8. Factor the expression.

$$49x^2 - 25$$